BY ORDER OF THE
SECRETARY OF THE AIR FORCE

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Space, Missile, Command, and Control

AIR SUPPORT OPERATIONS CENTERS AND TACTICAL AIR CONTROL PARTIES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

This instruction implements AFPD 13-1, *Theater Air Control System.* It provides principles, concepts, and guidance for tactical air support coordination and control and the fundamental procedures for operation of Air Support Operations Centers and Tactical Air Control Parties. This AFI does not apply to United States Air Force Reserve members or units. Do not supplement this AFI. Forward recommended changes through command channels via AF Form 847 to HQ ACC/DOYC.

SUMMARY OF REVISIONS

★This revision deletes the final sentence in paragraph A2.2.1.4. This sentence is deleted because it creates confusion by implying that unauthorized personnel may provide terminal attack control to CAS aircraft. A ★ indicates revisions from the previous edition.

Paragraph

Page

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Chapter 1

AIR SUPPORT OPERATIONS CENTERS (ASOC)

1.1. Organization. The ASOC is an operational component of the TACS under the operational control of the Air Operations Center (AOC). The ASOC coordinates and directs close air support (CAS) and reconnaissance sorties allocated by the Joint Force Air Component Commander (JFACC) following priorities established by the Land Component Commander (LCC). Its mission is to provide fast reaction to immediate requests from land forces for CAS. The ASOC is designed to provide rapid processing of Army requests for immediate CAS. It is located within the fire support center or element of the senior Army tactical field element command post (CP). The ASOC consists of both operational and maintenance elements organized in garrison under Air Support Operations Groups. ANG ASOCs may be organized under air support groups. Operational requirements determine size, configuration, manning, and equipment as depicted in Attachment 6. ASOCs will provide additional logistics, maintenance, and administrative support for deployed TACPs under their operational control as required. Attachment 2 describes the overall air support concept; paragraphs A 2.1, A2.2, and A 2.3 specifically discuss the ASOC in relation to the TACS.

1.2. Mission -- Functions. The ASOC receives, coor-dinates, and processes requests for immediate CAS. Requests are normally transmitted over the Air Force Air Request Net (AFARN) directly from TACPs to the ASOC. Intermediate level TACPs monitor transmissions and coordinate approval or disapproval with their collocated Army unit. A TACP will transmit disapproval when the Army G/S-3 at any intermediate echelon denies that request. Approval is indicated by absence of disapproval ("silence is consent") within a specified time (theater specific) as coordinated between the ASOC director and the G-3. Upon receipt of the request at the ASOC, concurrent coordination and planning begin. For a diagram of fire support channels, see attachment 4.

1.2.1. The ASOC fills Army requirements for immediate air support from distributed sorties or by authorized diversion of preplanned sorties. The AOC normally passes scramble and control authority to the ASOC for allocated sorties and establishes coordination procedures to facilitate authorized diversion of preplanned missions. The ASOC keeps the AOC advised of the air effort needed to satisfy Army air support requirements and will request additional air resources when requirements exceed the sortie allocation. Reconnaissance sorties are usually not allocated to ASOCs. ASOC recce requirements are combined with all other recce requirements at the AOC, and the sorties are planned to satisfy multiple requests. In-theater airlift is coordinated and controlled in accordance with AFM 2-50, USA/USAF Doctrine for Joint Airborne and Tactical Airlift Operations.

1.2.2. As a USAF tasking agency for the Army commander, the ASOC provides advice on requests for CAS and reconnaissance with the assistance of ALOs at corps, division, brigade or regiment, and battalion TACPs.

1.2.3. The ASOC assists the corps staff to plan for executing localized J-SEAD (Joint Suppression of Enemy Air Defenses). It participates in J-SEAD target nominations and weapons selections, and coordinates J-SEAD operations with the AOC and subordinate TACPs.

1.2.4. The ASOC coordinates airspace requests with organic Army air defense organizations through the Corps Army Airspace Command and Control Element (A2C2). Corps airspace requests are processed through the Corps A2C2 Element to the Battlefield Coordination Element (BCE) A2C2 section, collocated with the AOC. The BCE A2C2 section coordinates Army airspace requests with the AOC Airspace Control Center who publishes the theater Airspace Control Order. The AOC Airspace Control Center is the planning and execution function for the Airspace Control authority. The Corps A2C2 element recommends minimum risk routes and other airspace control measures supporting the LCC, then forwards these requests to the BCE who coordinates with the AOC Airspace Control Center. Additionally, the Corps A2C2 will process all air defense control measures such as weapons free zones, joint engagement zones, and missile engagement zones with the BCE A2C2

Element who will then coordinate with the AOC Airspace Control Center. The AOC Airspace Control Center normally represents the Area Air Defense Commander.

1.3. Functional Positions. During contingency operations, the ASOC is commanded by the Corps ALO who becomes the Director. Functional positions within ASOC operations normally include the Assistant Director, the Fighter Duty Officer (FDO, AFSC 11F4/12F4), Fighter Duty Technician (AFSC 1C4X1) or Command and Control Specialists (AFSC 1C3X1 for ANG only), Intelligence Applications Officers (AFSC 14N3B), Intelligence Operations Technicians (AFSC 1N0X1), Communications-Computer Systems Officers (AFSC 33S3), and Radio Communication Systems Technicians (AFSC 3C1X1).

1.3.1. Director. The Corps ALO normally becomes the ASOC Director, reporting to the AOC, when the ASOC is deployed and locates within the senior Army element CP, normally the Corps. The ASOC Director reports to the AOC Director or Commander. Functions of the ASOC Director include the following:

- Represents the Air Force Forces (AFFOR) Commander and serves as the senior air advisor to the Army Corps commander.
- Exercises control over sorties made available to the ASOC.
- Ensures that air assets are used in the most effective manner commensurate with the current threat, battlefield situation, and disposition of friendly air defense weapons.
- Advises the AOC of the air effort needed to fill Army requirements.
- Assists the Corps staff with the development of fire support plans and supporting air sorties.
- Is responsible for assigned Air Force personnel and equipment.
- Follows AOC directives and ensures that the ASOC performs duties to support the AOC.
- Exercises operational control and supervisory responsibilities (IAW UCMJ) over assigned TACPs, in addition to providing logistical, maintenance, and administrative support.
- Is responsible for operation and control of the ASOC communication nets.
- Ensures subordinate TACPs receive necessary portions of the Air Tasking Order /Integrated Tasking Order (ATO/ITO) for effective mission execution. The complete text of the ATO/ITO will not be disseminated below ASOC level due to possibility of compromise.
- Coordinates with Corps G-2 and G-3 to establish liaison, as a minimum, with the following element agencies: FSE, A^2C^2 element, aviation, special operations, G-3 Plans/Operations, and G-2 targeting.
- Coordinates J-SEAD requirements with Corps G-3.

1.3.2. Assistant Director. The squadron commander of the ASOC or Operations Officer normally becomes the Assistant Director. Functions of the Assistant Director are:

- Performs overall supervision of the ASOC activities when required.
- Reviews mobility and load plans to support displacement requirements.
- Supervises and manages personnel resources.
- Supervises and manages operations of the leap ASOC.
- Manages and reviews ASOC equipment resources and requirements.

1.3.3. Fighter Duty Officer (FDO). This position is manned by Air Liaison Officers (AFSC 11F4U) or senior Fighter Duty Technicians (AFSC 1C471) if an Air Liaison Officer is unavailable:

- Responsible for the planning, coordination, and execution of CAS and reconnaissance missions.
- Advises the Director and staff on matters pertaining to CAS.
- Advises the Army commander and his staff, through the Director, of the capabilities of the available CAS resources.
- Monitors status, capabilities, and limitations of TACPs.
- Maintains current status of distributed air assets and effects changes in alert status by contact with the Wing Operations Centers (WOC) and the AOC.
- Reviews immediate CAS requests for feasibility and threat compatibility.
- Assigns and launches distributed sorties to fill Army requirements for CAS.
- Coordinates CAS missions within the ASOC positions and with other TACS elements.
- Advises TACPs on matters pertaining to CAS.
- Validates localized J-SEAD requirements.

1.3.4. Fighter Duty Technicians (AFSC 1C4X1):
- The senior Fighter Duty Technician performs the duties and responsibilities of Fighter Duty Officer if required (AFSC 1C471/1C491 with SEI 914 or previous Terminal Attack Controller experience):
  - Performs shift supervisor duties as required.
  - Supervises the operation of the AFARN.
  - Supervises subordinate Fighter Duty Technicians.
- All Fighter Duty Technicians perform the following functions:
  - Coordinates and processes CAS or recon-naissance requests.
  - Responsible for posting, filing, displaying, updating, and recording information on logs, charts, or other records.
  - Posts status of CAS, reconnaissance, airborne Forward Air Controller and TACPs.
  - Breaks out and disseminates the ATO/ITO.
  - Operates the AFARN.
    - Provides Net Control Station (NCS) functions for the Air Force Air Request Net.
    - Receives air support requests from TACPs and dispatches the information to the appropriate ASOC sections.
    - Transmits mission data and other operational information to TACPs.
    - Makes entries in required communi-cations logs and journals.
    - Provides communications net and associated equipment status reports to the Communications Operations Officer.

1.3.5. Command and Control Specialist (AFSC 1C3X1) (ANG only):
- Responsible to the appropriate duty officer for posting, filing, displaying, updating, and recording of information on logs, charts, or other records.
- Posts status of CAS, reconnaissance, and AFAC assets.

1.3.6. Intelligence Applications Officer:
- Processes immediate CAS requests for target validation and for ordnance recommendations.
- Identifies J-SEAD requirements to support the CAS effort.
- Monitors the current tactical situation and recommends adjustments to preplanned CAS missions.
- Screens intelligence reports to determine significance and updates the Director and ASOC staff on changes in the threat affecting current and future operations.
- Passes significant Army-developed intelligence pertinent to tactical air operations to the AOC through spot intelligence reports.
- Passes significant intelligence and target information received from Air Force elements to the Army G-2.
- Maintains situation maps, intelligence reference materials, and supervises maintenance of the intelligence mobility kit.
- Monitors the Inflight Report Net.
- Supports the corps target cell as required.

1.3.7. Intelligence Operations Technician:
- Assists in screening intelligence reports and posting situation and targeting maps.
- Plots and validates immediate air request target locations.
- Compiles targeting statistical data and drafts daily bomb damage assessment summary reports.
- When appropriate, monitors the Inflight Report Net and records mission results.
- Maintains intelligence reference materials and the intelligence mobility kit.

1.3.8. Communications-Computer Systems Officer:
- Oversees the operation of all ASOC communi-cations facilities.
- Ensures communications security equipment, publications, and procedures are used.
- Establishes and reviews log and journal entry and maintenance procedures.
- Responsible for the communication architecture and overall operation of the AFARN.
- Ensures availability and proper use/maintenance of TACP call signs and frequencies.
- Establishes procedures for monitoring and tracking TACP locations and operational status.
- Responsible for dissemination of the communications plan.

- Oversees operation of Contingency Theater Automated Planning System (CTAPS).

1.4. Communications Procedures. The normal mode for all communications will be via secure voice and or data means. Air support coordination depends heavily upon the availability of an organized communications system that will provide current information and capability to control allocated resources. The ASOC is responsible for ensuring frequencies are available for the various communications nets from the appropriate frequency managers. ASOC communications and procedures interface with the various Air Force and Army elements as follows:

1.4.1. Army Tactical Nets. Hardwire telephone facilities may be provided to the ASOC for communications links to the CP and Army tactical communication nets. The ASOC has organic VHF-FM voice communications equipment for entry into Army Command Nets as required.

1.4.2. Command and Control Net. Interfaces with other TACS units (AOC, CRC, and WOC) are accomplished via HF-SSB, tropo-microwave links, and satellite communication systems (SATCOM) of which all systems should normally be encoded. These communications nets are used for command communications traffic including operations and scramble orders, coordination, intelligence, and air defense warning. Whenever possible, reliability and survivability are enhanced by using multiple systems and redundant switches.

1.4.3. Air Force Air Request Net (AFARN). The AFARN is the link between the ASOC and subordinate TACPs for request and coordination of immediate air support. The ASOC is the Net Control Station (NCS). An AFARN will normally be provided for each division. The ASOC will activate and operate as many nets as necessary, contingent with needs, equipment available, and frequencies allocated. The normal mode for the AFARN is secure HF-SSB; however, the ASOC must be capable of operating the AFARN (secure) on other radios when the tactical situation requires.

1.4.4. Tactical Air Control Net. The purpose of this UHF-AM Air-Ground-Air (AGA) net is to coordinate mission direction of airborne aircraft under control of the CRC or CRE. The ASOC interfaces with the Tactical Air Control Net through the Command and Control Net.

1.4.5. Tactical Air Direction Net. The TACPs/AFACs use this UHF/VHF-AM AGA net for the direction and control of aircraft engaged in air support. The TACP is the prime user of this net and is allocated specific frequencies to conduct tactical operations. The ASOC is also authorized to enter this net to pass time sensitive information.

1.4.6. Inflight Report Net. This UHF/VHF-AM AGA net is for the airborne transmission of inflight reports to the elements of the TACS. Reports are normally passed to the CRC or CRE and relayed to the AOC and/or ASOC. The ASOC and AOC monitor this net when in range.

1.4.7. TACP Command Net. This net is used to pass urgent administrative, logistic, and command information between the ASOC and subordinate TACP elements.

1.5. Site Layout. To permit rapid exchange of information and direct coordination, the ASOC must be located within the CP, as close as possible to the Fire Support Element (FSE). Specific site configuration depends upon Corps and ASOC agreements, terrain features, and the tactical situations.

1.6. ASOC Leap Concept. The ASOC normally moves with the Army main CP with which it operates. The leap package is a resource used to permit continuous operations during mobile combat situations by providing an interim ASOC capability. The package allows rapid main ASOC resumption of operations following a displacement or loss of the Army main CP. The manning and equipment requirements of the leap ASOC are determined by the Director. The leap package is deployed at a time agreed upon with Army planners. Depending on the specific Army operating procedures, the original main ASOC will continue to function while the leap ASOC is being set up. The leap ASOC assumes control coincident with Army transfer of G-2 and G-3 approval authority to the leap Army site. Portions of the original main ASOC may join the leap ASOC to reconstitute a new main or move in total to a new main CP location. The orchestration of an ASOC leap will vary with the tactical situation, Army movement tactics, and equipment limitations. Each ASOC must adapt its capability and resources to meet the requirements of its associated Army CP.

1.7. Airborne Battlefield Command and Control Center (ABCCC). The ABCCC is an airborne command and control element of the TACS that provides management of forces operating beyond the normal communication coverage of ground TACS elements. The mobility and communications advantages inherent in this platform enable it to stay abreast of the current ground and air situation within its assigned area of responsibility. This ensures continuity of operations in the event elements of the TACS are disabled or not yet deployed. The ABCCC system, with its trained battle staff, is able to perform limited roles for Crisis Management, Special Contingency Operations, ACC Combat Operations, and ASOC Operations (see MCR 55-130).

Chapter 2

TACTICAL AIR CONTROL PARTIES (TACP)

2.1. Organization. TACPs are organized as subordinate units of a Numbered Air Force (NAF) or an Air Operations Group (AOG) and when in garrison are under the operational control of the Air Support Operations Group, the Corps TACP, (ANG TACPs are organized as separate units - Air Control Party Flights (ACPFs) within their respective states with a parent organization of an Air Support Group). The parent organization is responsible for the administrative support of TACP units. Logistic support of TACPs is shared between the Air Force and the Army in accordance with AR 525-25. When deployed, TACPs report operationally to the ASOC or senior echelon TACP if an ASOC is not deployed. Their purpose is to provide liaison to the ground commander on matters related to tactical air support and to provide terminal attack control for CAS missions. Army force structure drives TACP staffing as depicted in attachment 5. Attachment 2 describes the overall air support concept; paragraphs A 2.1 and A 2.4 discuss TACPs in relation to the TACS.

2.1.1. The USAF aligns TACPs with Army combat maneuver units from corps through battalion and squadron. TACPs aligned with corps, division, regiment, brigade, combat aviation brigades and ranger battalion headquarters are permanently stationed with the Army unit and function as a special liaison staff element within that unit headquarters. Battalion TACP equipment and Tactical Air Command and Control Specialists are normally organized at division or brigade level in garrison and dispatched to aligned Army battalions when deployed.

2.1.2. TACPs are organized as Air Support Operations Squadrons (ASOS) or Flights (ASOF) at their respective Army installations. Each unit will be commanded by an Air Liaison Officer (ANG TACPs are organized into Air Control Party Flights (ACPF) within several states and are not necessarily located on Army installations).

2.1.3. TACPs are manned with Air Liaison Officers and Tactical Air Command and Control Specialists (AFSC 1C4X1) at corps, division, regiment, brigade, and battalion. Communications Equipment Maintenance personnel, Aerospace Ground Equipment (AGE) Repairmen, Supply Technicians, and Administrative personnel are also assigned to division and regimental TACPs. (See applicable UTC for specific manning.) All personnel maintain mission status in accordance with AFI 13-102.

2.1.4. TACPs normally deploy with aligned Army units during contingencies, exercises, tests, and evaluations and will be manned according to attachment 5 with standard TACP staffing.

2.1.5. AFAC aircraft are assigned and maintained at a Main Operating Base (MOB). Aircraft support equipment and personnel may be deployed to a Forward Operating Location (FOL) to operate with Army units commensurate with the availability of USAF resources in accordance with AFFOR Commander directives. Airborne FACs may perform terminal attack control of CAS missions if the tactical situation permits or may serve as the Tactical Air Coordinator-Airborne (TAC-A) when terminal attack control is not feasible (see MCM 3-1, Vol VIII).

2.2. Mission - Functions:

2.2.1. TACP operations fall into two general categories: liaison and control. Senior echelon TACPs (corps through brigade) function primarily in the liaison role. Battalion TACPs have the added responsibility of the terminal attack control role (see paragraph 2.3.).

2.2.2. The general functions of a TACP are to:

- Advise the Army commander and staff on the capabilities and use of air power.
- Assist the Army commander and staff in planning for air support operations.
- Provide coordination and attack planning for J-SEAD operations, targets of opportunity when authorized by the Rules of Engagement (ROE), and targets in position for near term effect on friendly forces.
- Operate and maintain TACP communications equipment to support the AFARN, TAD Nets, and the Airlift Advance Notification/Coor-dination Net (TALO).
- Provide terminal attack control of aircraft employed to meet Army requirements.
- Provide USAF tactical expertise and a focal point for detailed integration of CAS with the fire and maneuver of ground forces.
- Be familiar with Army maneuver tactics and weapon systems. Ground combat TACP training is the responsibility of the host Army unit, requested by the senior ALO, and supported by written inter-service agreements.

2.3. Functional Positions:

2.3.1. Air Liaison Officer (ALO). The Corps, Division, Regiment Brigade, or Battalion ALO is the senior Air Force officer at each TACP and is responsible for subordinate echelon TACPs. ALOs have the following functions and responsibilities that vary in scope and degree with the level of command supported:

- Represents the Air Component Commander as the senior air advisor to the appropriate Army commander.
- Advises the Army commander and staff on the capabilities and proper use of air power.
- Responsible for the operations of the AFARN and TAD Nets.
- Coordinates and transmits requests for immediate air support.
- Assists army counterparts in the preparation of preplanned air support requests.
- Assists in the preparation of Army plans dealing with tactical air support.
- Coordinates tactical air support missions with the FSE and the appropriate Army Airspace Command and Control (A^2C^2) element.
- Integrates air support sorties with the Army unit scheme of maneuver.
- Ensures a terminal attack control qualified ALO or Enlisted Terminal Attack Controller (ETAC) is available to control CAS missions.
- Keeps abreast of Army ground operations and informs the appropriate USAF agencies of the situation.
- Responsible for assigned Air Force TACP personnel and equipment.
- Reports operational status of assigned equipment to the ASOC and ensures that requests for Air Force unique supply items are forwarded to the ASOC.
- Coordinates with Army staff agencies on TACP facilities, messing, POL support, and main-tenance of vehicles and equipment.
- Above battalion level, coordinates training opportunities with Army staff for ALOs to improve Army knowledge of TACP utility.
- Maintains currency of AGOS-provided lesson plans for use in training the Army staff.

2.3.1.1. Logistics support must be ensured by an established system that is responsive to TACP needs. ALOs will obtain logistic support from the Army in accordance with AR 525-25 under the terms of DOD 4000.19, Interservice, Interdepartmental, and Interagency Support, and the ACC/USAFE/PACAF Memorandum of Agreements with their respective Army commands. Such negotiated agreements will be documented as inter-service support agreements and will be approved by parent organizations. Each agreement will cover logistics support to be provided by the Army and will specify Army maintenance supply support of TACP equipment. Support Agreements, DD Form 1144, will be consummated separately. Whenever possible, such agreements will be reviewed and, if necessary, updated prior to deployment to a new environment.

2.3.2. Fighter Liaison Section (Corps, Division, Regiment, Brigade, and Independent Brigade).

- Advises the ALO and Army commander's staff on the capabilities and employment of available air assets including reconnaissance assets.
- Assists in the development of air support requests.
- Assists the Army FSE with the preparation of the Fire Support Plan.
- Coordinates air support with the FSE and A^2C^2.

2.3.3. Theater Airlift Section (Corps/Division/Brigade/ Regiment). Responsibilities are defined in Air Mobility Command Regulation (AMCR) 55-55.

2.3.4. Battalion Air Liaison Officer.

- Coordinates with the ground commander on employment of tactical air support.
- Maintains a station on the AFARN, TAD Net, and appropriate Army net(s).
- Transmits Army requests for immediate air support.
- Coordinates all air support requests, including J-SEAD and JAAT, with the FSE and A^2C^2 when available.
- Forwards weather observations to the ASOC as required.
- Performs CAS terminal attack control.
- Reports mission results to flight lead.
- Advises fire support personnel or the Army commander when aircraft will enter and have cleared the target area.
- Passes intelligence information to the ASOC and appropriate S-2.
- Trains battalion staff on TACP utility and AF asset capabilities.

2.3.5. Tactical Air Command and Control Specialist (AFSC 1C4X1) (Corps through Battalion TACPs). The 1C4X1 AFSC provides TACP members trained in performing combat communications operations and in coordinating air support with the Army.

- Airmen. 1C4X1 airmen at the 3 skill levels are Apprentice level performers. They are primarily responsible for establishing and maintaining communications with other TACPs, the ASOC, and their aligned army unit and are

trained in a variety of communications, operations, and field skills. Their experience, capabilities, and limitations must be taken into account when duties are assigned.

- NCOs. 1C4X1 NCOs at the 5 and 7 skill levels are Journeyman or Craftsman level technicians and supervisors who have attained ranks com-mensurate with their experience and expertise. They possess a variety of communications, operations, liaison and field skills to include the ability to perform emergency Terminal Attack Control of strike aircraft. 1C4X1s at the 7 and 9 levels are primarily supervisors, superin-tendents, and managers.
- ETACs. Certain specially qualified 1C451 and 1C471 Tactical Air Command and Control Specialists receive special additional training and are awarded a Special Experience Identifier (SEI 914). They are subsequently certified as ETACs. ETACs can routinely perform unsuper-vised Terminal Attack Control and add to the flexibility of the brigade or battalion ALO in discharging his duties of liaison with the battalion commander and staff.

Chapter 3

AIR SUPPORT FUNCTIONS AND PROCEDURES

3.1. General. Air Support includes the combat func-tions of Close Air Support (CAS), Air Interdiction (AI), Reconnaissance, and Theater Airlift (TAL). The ASOC provides the necessary liaison and coordination to incorporate apportioned sorties and to integrate the air operations into the Army scheme of maneuver. The AME/TALCE and or TALO/CCT provide liaison, coordination, and control for tactical airlift. Airlift operations are contained in AFM 2-50.

3.2. Air Support Requirements:

3.2.1. Preplanned Requests. Target requirements that can be foreseen in time to be included in the ATO/ITO are forwarded as preplanned air requests. The TACP provides technical expertise to the Army S-2/3 or G-2/3 staff for planning this support. The preplanned requests are then forwarded through Army channels to the appropriate Army level for approval. The approved requests are then sent through Army channels to the Battlefield Coordination Element (BCE) at the AOC for incorporation into the ATO/ITO. Preplanned requests for air support normally do not include detailed target information and may not include detailed timing information because of the lead time involved. Pre-planned requests involve any information, even general information about planned schemes of maneuver, that can be used in the apportionment, allocation, and tasking cycle. Estimates of percent weapons effects needed (e.g., 60 anti-armor, 40 anti-personnel), sortie time flows, peak need times, and anticipated distribution patterns are vital to preplanning the ATO/ITO. ALOs should request that such information is forwarded through the BCE as soon as it is foreseen by the echelon's planners. The ALO must ensure that the Army does not wait to plan all details of individual air support missions at battalion level before forwarding data with which to preplan air support. Higher Army echelons must request air support as soon as the need is anticipated and update and refine requests regularly.

3.2.2. Immediate Requests. Target requirements for CAS are often generated by the dynamic tactical situation with insufficient time to be included in the ATO/ITO. Immediate requests may enter the TACS through the ASOC or TACPs at any Army level. Upon receipt at the ASOC, concurrent coordination and planning begin. Use of this air support must, however, still be in accordance with the concept of operations of the LCC.

3.3. Close Air Support (CAS). The JFACC allocates sorties for Army requirements from resources apportioned by the JFC. Allocated sorties are distributed among various land maneuver units following guidance provided by the LCC. CAS is accomplished by tactical aircraft capable of delivering a wide range of ordnance with terminal attack control provided by a AFAC/TACP. CAS sorties can be flown in response to land forces other than the Army, i.e., U.S. Marine Corps or Allied Forces.

3.3.1. All air support sorties must be preplanned by the Air Force to some degree. Ideally, full mission information such as target, location and type, controller call sign and frequency, defenses, and ground situation would be available for generating the Air Tasking Order. However, ATO/ITO generation typically begins 72 hours ahead of the execution period, and therefore, it is normally difficult for the ground forces to provide detailed mission information for air support far in advance. Instead, each echelon uses its planned scheme of maneuver to generate priorities of fires (including priorities for CAS), expected categories of targets (by percentage), time flows and peak need times, expected user units, and other factors as early as possible. These preplanned factors are passed to higher echelons as soon as possible and refined as soon as further information becomes available (for a description of how this process affects apportionment, allocation, and tasking of CAS sorties see Joint Pub 3-03 "Interdiction"). Requests for CAS in future ATO/ITO cycles are passed through Army channels for consolidation, validation, and prioritization. Requests or refinement of requests for air support in the cycle of the ATO/ITO being executed are passed through AF channels to the ASOC as immediate requests.

3.3.2. Either type of mission (immediate or preplanned) request may originate at any echelon of the Army forces to which a TACP is aligned.

3.3.2.1. In order to be published in the ATO/ITO, preplanned requests must reach the AOC by a time dictated by the ATO/ITO planning cycle of the supporting AOC. Those preplanned requests not reaching the AOC in time to be published in the ATO/ITO could be filled by immediate requests.

- The ATO/ITO includes CAS missions that are reviewed by the ASOC Director, FDO, and the G/S-3 Air.
- The ASOC FDO extracts the ATO/ITO infor-mation on those CAS sorties distributed to satisfy anticipated immediate requests. The ASOC FDO, in coordination with the G-3 Air, Intelligence Applications Officer, the WOC(s), and the AOC FDO, reviews ordnance configurations, alert postures and/or flow schedules for these assets and adjusts these, as necessary, to fulfill Army requirements.

3.3.2.2. TACPs normally pass immediate requests over the AFARN to the ASOC, however, any appropriate means available to the TACP can be used. The request is passed to Army (normally the G-3 Air) for validation and approval, ASOC Intelligence Applications Officer for coordination, and the ASOC FDO for planning. The ASOC FDO passes the scramble or divert order and control information to the AOC, WOC, and CRC. Sorties not assigned to the ASOC must be requested and executed through the AOC. Mission information or disapproval is transmitted by the Fighter Duty Technician to the originating TACP.

3.3.2.3. The ASOC will specify the format for CAS requests. Sensitive data such as coordinates and time on target (TOT) should be encrypted or passed on a secure frequency as dictated by the tactical situation and the enemy's estimated capability to react. The ASOC may develop standard assumptions for their TACPs to reduce transmission time. Subordinate TACPs will be advised when such assumptions are developed.

3.3.3. The method of mission control depends upon the communications and control agencies available. The Tactical Air Control Net will normally be used to control flights into the target area where they are handed off to the AFAC or TACP. When scrambling immediate CAS missions, the ASOC FDO may provide full target information to the WOC or may launch the aircraft and pass target information to the CRC or other appropriate control agency for relay to the attack flight. Terminal attack control is accomplished on the assigned TAD Net.

3.3.4. Inflight reports may be submitted to any TACS agency but are normally transmitted to the CRC and relayed through the AOC and ASOC to the TACP. Inflight reports will be submitted on significant enemy activity.

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GLOSSARY OF ABBREVIATIONS

Abbreviations and Acronyms

A2C2−Army Airspace Command and Control
AAGS−Army Air Ground System
ABCCC−Airborne Battlefield Command and Control Center
ACE−Airspace Coordination Element
ACPF−Air Control Party Flight
ADA−Air Defense Artillery
AFAC−Airborne Forward Air Controller
AFARN−Air Force Air Request Net
AGA−Air Ground Air
AGE−Aerospace Ground Equipment
AI−Air Interdiction
ALO−Air Liaison Officer
AME−Air Mobility Element
ANG−Air National Guard
AOC−Air Operations Center
ARTY−Artillery
ASOC−Air Support Operations Center
ASOCS−Air Support Operations Center Squadron
ATO−Air Tasking Order
AWACS−Airborne Warning and Control System
BALO−Battalion Air Liaison Officer
BCE−Battlefield Coordination Element
BDE−Brigade (Army)
BN−Battalion (Army)
CA−Counter Air, also Coordinating Altitude
CAS−Close Air Support
CCT−Combat Control Team
CM−Collection Manager
CO−Company (Army)
CP−Command Post
CRC−Control and Reporting Center
CRE−Control and Reporting Element
CTAPS−Contingency Theater Automated Planning System
DCA−Defensive Counter Air
DIV−Division (Army)
ETAC−Enlisted Terminal Attack Controller
FA−Field Artillery
FDC−Fire Direction Center
FDO−Fighter Duty Officer
FDT−Fighter Duty Technician
FIST−Fire Support Team
FM−Frequency Modulation (Normally VHF FM)
FOL−Forward Operating Location
FSCOORD−Fire Support Coordinator
FSE−Fire Support Element
FSO−Fire Support Officer
G-2−General Staff Intelligence Officer (Corps/Div)
G-3−General Staff Operations Officer (Corps/Div)
GLO−Ground Liaison Officer
HF-SSB−High Frequency Single Sideband
ITO−Integrated Tasking Order
JAAT−Joint Air Attack Team

JFACC−Joint Forces Air Component Commander
JFC−Joint Force Commander
JFLCC−Joint Force Land Component Commander
JOC−Joint Operations Center
J-SAK−Joint Attack of the Second Echelon
J-SEAD−Joint Suppression of Enemy Air Defenses
LCC−Land Component Commander
MOB−Main Operating Base
MPC−Message Processing Center
NCS−Net Control Station
OCA−Offensive Counter Air
RFI−Request for Information
ROE−Rules of Engagement
S-2−Staff Intelligence Officer (Brigade/Battalion)
S-3−Staff Operations Officer (Brigade/Battalion)
SEAD−Suppression of Enemy Air Defenses
SPINS−Special Instructions
TAC-A−Tactical Air Coordinator - Airborne
TACP−Tactical Air Control Party
TACS−Theater Air Control System
TAD−Tactical Air Direction (Net)
TAL−Theater Airlift
TALCE−Tanker/Airlift Control Element
TALO−Theater Airlift Liaison Officer
TOC−Tactical Operations Center
TOT−Time on Target
TSO−Tactical Surveillance Officer
UHF−Ultra High Frequency (UHF-AM)
VHF−Very High Frequency (VHF-AM)
WOC−Wing Operations Center
1C3X1−Command and Control Specialist
1C4X1−Tactical Air Command and Control Specialist

THE AIR SUPPORT CONCEPT

A2.1. Theater Air Control System. The Air Force Forces (AFFOR) Commander exercises operational control over his assigned forces through the Theater Air Control System (TACS). The focal point for tasking and exercising operational control is the Air Operations Center (AOC), the senior element of the TACS. Subordinate TACS agencies perform the tasks of planning, coordination, monitoring, surveillance, control, reporting, and execution of the airland operations. These agencies are Airborne Warning and Control System (AWACS), Control and Reporting Center (CRC), Message Processing Center (MPC), Control and Reporting Element (CRE), Airborne Battlefield Command and Control Center (ABCCC), Air Support Operations Center (ASOC), Tactical Air Control Party (TACP), Air Mobility Element (AME), Tanker/Airlift Control Element (TALCE), and Combat Control Team (CCT). For an illustration of the TACS/AAGS system, see attachment 3.

A2.2. Mission. The TACS provides the AFFOR with the organization, personnel, and equipment necessary to control theater air operations, execute area air defense and airspace management, and coordinate operations with components of other military services. The mission of the air support elements is to plan, coordinate and control counter-air, interdiction, close air support, reconnaissance, and in-theater airlift operations conducted in concert with operations of land forces and operate dedicated communications nets to ensure timely and adequate response to land forces requirements.

A2.2.1. Close Air Support (CAS). Air action by fixed- and rotary-wing aircraft against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces.

A2.2.1.1. CAS missions are of two types: Preplanned and Immediate as defined in the DOD Dictionary of Military and Associated Terms. Both types of missions may be requested by the Air Liaison Officer (ALO) at any Army echelon of planning.

A2.2.1.2. Immediate CAS missions may be tasked using either Push CAS or Pull CAS techniques.

A2.2.1.2.1. Push CAS - Technique to provide maximum number of aircraft for CAS without waiting for a request. The fighters are “on station” until a predetermined fuel state, end of a vulnerability time, or released by the FAC before being diverted to a backup mission or returned to base. The AOC decides to employ this technique based on JFACC quidance and asset availability. (MCM 3-1, Volume 1)

A2.2.1.2.2. Pull CAS - Technique where support air is requested through the TACS/AGS system prior to committal to a CAS mission. This normally applies to immediate requests. Limited air assets and mission priority will make this the normal employment technique. (MCM 3-1, Volume 1)

A2.2.1.3. During operations, a terminal attack control qualified Air Liaison Officer (ALO), Airborne Forward Air Controller (AFAC), or Enlisted Terminal Attack Controller (ETAC) is normally available for control of close air support missions. These individuals are the only authorized Air Force personnel permitted to routinely control CAS missions in support of US Army units or other ground maneuver units, allied or joint, when attached. During emergency combat operations however, when these individuals are not available, a designated individual may direct attacking aircraft for close air support. The ground commander must designate this emergency terminal control agent and assumes responsibility for troop safety. There is no peacetime requirement for emergency CAS.

★A2.2.1.4. The Joint Air Attack Team (JAAT) is a combination of attack and scout helicopters and fixed-wing attack aircraft, which may be supported by field artillery, operating together to simultaneously attack a single target or target array. The JAAT may operate either as an integrated combined arms team or may operate independently away from ground units. When integrated with ground forces, the JAAT may be strengthened by the firepower capabilities of maneuver forces.

A2.2.2. Air Reconnaissance and Surveillance. Air Reconnaissance and Surveillance are air actions employing visual observations or sensors to acquire intelligence information. Reconnaissance forces are designed to meet the requirements of all joint forces rather than for any single component.

A2.3. Air Support Operations Center (ASOC). The ASOC is a specialized operations center responsible for planning, direction, and control of the air effort in support of land forces maneuver objectives. It coexists with the senior Army tactical field element, normally a corps (but can be an independent division), and should be collocated with the corps Fire Support Center (FSC). In a multi-corps environment, there will normally be one ASOC with each corps, reporting individually to the AOC. The corps ALO becomes the ASOC director when the ASOC is deployed and the ASOC commander performs as the assistant ASOC director.

A2.4. Tactical Air Control Party (TACP). The TACP is the most forward operations element of the TACS that functions directly with Army maneuver units. These elements are located with corps, division, brigade, separate brigade or regiment, combat aviation brigade, and battalion ground combat maneuvering units and are operationally subordinate to the ASOC. The TACP mission is to assist ground forces in planning, requesting, coordinating, and controlling air power.

A2.5. OA-10 Fighter Squadron (FS). The FS or elements will normally deploy to Forward Operating Locations (FOL) during contingencies to meet AFFOR Commander requirements. Tasking for OA-10 aircraft will pass from the AOC to the integrated A/OA-10 squadron. However, the AOC may delegate to the ASOC operational control of AFAC aircraft employed within the ASOC's area of responsibility.

A2.6. Coordination and Control. The responsibility for the coordination of joint airland operations is shared equally by the AFFOR Commander and Joint Force Land Component Commander (JFLCC). They have parallel capabilities for the coordination and integration of tactical air support with land force operations through the Air Force TACS and the Army Air Ground System (AAGS). The Battlefield Coordination Element (BCE) is an Army liaison element assigned to the JFLCC and located in the AOC. The primary function of the BCE is liaison between the JFLCC and the AOC (for more information see J-SAK, TACP 50-29/TRADOC PAM 525-45).

A2.7. Voice Communications. The TACS voice communications are those which are required to command, direct, and control air operations. These communications are aligned into the functional areas of command, control, and air support coordination. The ASOC and TACPs are provided equipment and personnel to operate tactical air support nets and to interface with air control nets and in-flight report nets. The functional relationships of the communications are:

A2.7.1. Command Communications. The ASOC is interconnected with other elements of the TACS and subordinate units by command communications nets (voice, teletype, data) used for communications traffic including operations and scramble orders, coordination, intelligence, weather, operational reporting, and air traffic and air defense warnings.

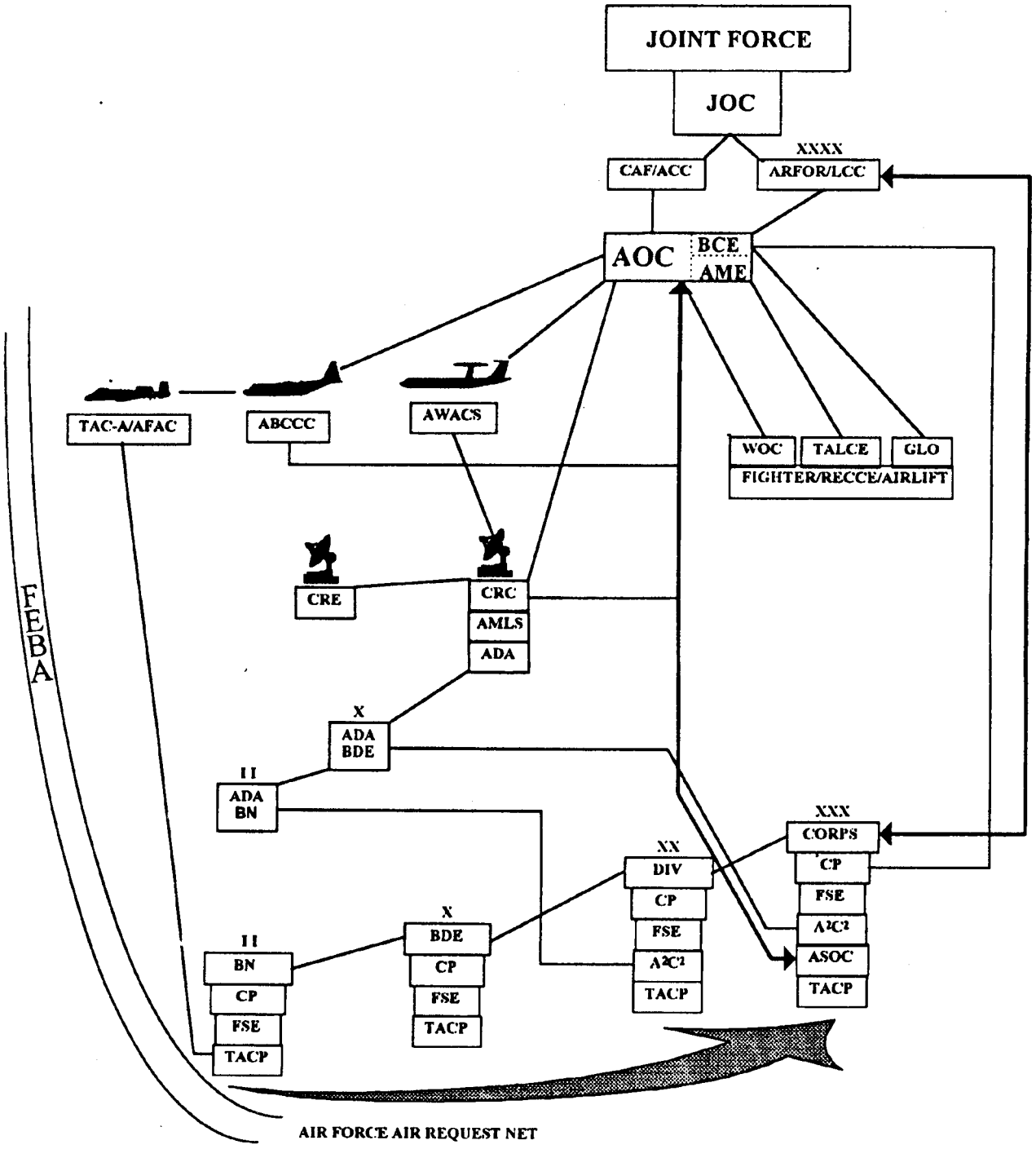
A2.7.2. Control Communications. Air Force Tactical Air Control Nets include the air/ground and interfacing communications employed by the appropriate controlling agencies for sector and subsector control of mission aircraft. Control of air support aircraft is provided to the contact point where the flight receives direction for hand-off to an AFAC or TACP Tactical Air Direction (TAD) Net frequency for final control. The ASOC coordinates mission direction with the appropriate control agency, but has limited capability to monitor the control net.

A2.7.3. Air Support Communications. Air Support Communications includes the equipment to establish the Air Force Air Request Net(s) (AFARN), TAD Net(s), and Airlift Advance Notification/Coordination Net(s) employed to request, coordinate, and control air support assets.

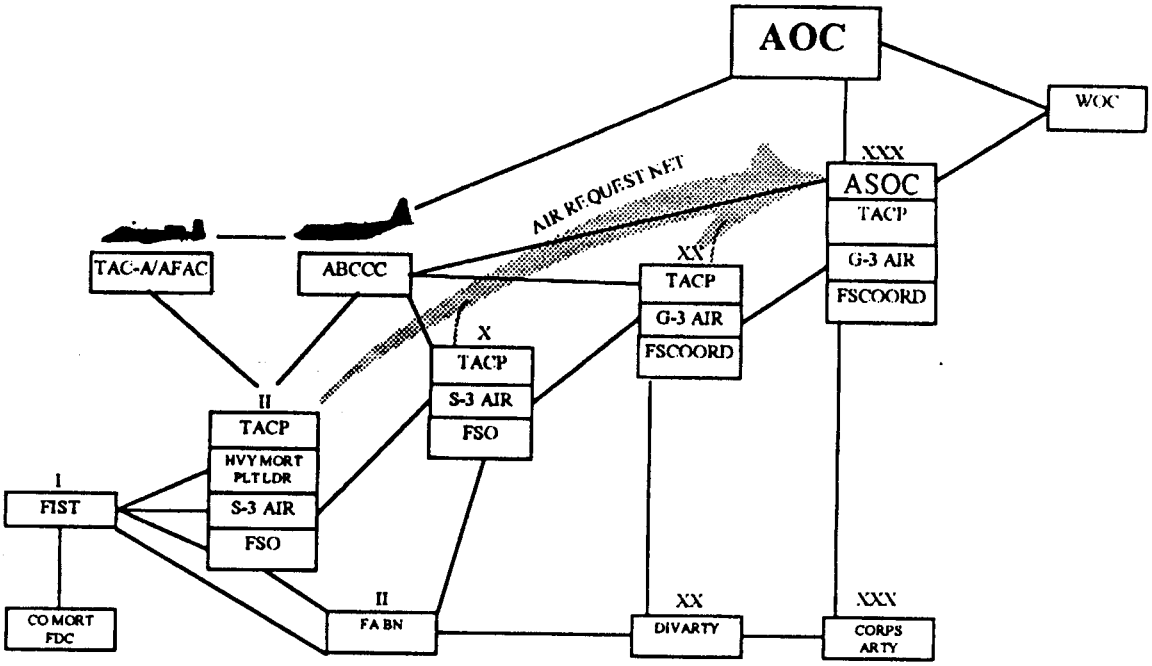
A2.7.3.1. Air Force Air Request Net (AFARN). The ASOC is the net control station for one or more nets and maintains appropriate logs and records. All TACPs monitor the net that is used to transmit requests to the ASOC for immediate tactical air support. The number of AFARNs established by an ASOC will depend on the amount of traffic anticipated. The primary equipment provided is high frequency single-sideband radio (HF-SSB); however, other communications methods may be used when the situation dictates.

A2.7.3.2. Tactical Air Direction (TAD) Net. The TAD Net provides necessary communication for the ASOC and each subordinate TACP for directing aircraft allocated for tactical air support missions. This net consists of UHF, VHF-AM, and VHF-FM radios available in the AFAC aircraft and the mobile communications centrals assigned to the TACP.

THEATER AIR CONTROL SYSTEM / ARMY AIR GROUND SYSTEM



FIRE SUPPORT CHANNELS



STANDARD TACP STAFFING

AFS	GRADE	AFSC	Corps	Div	Avn Bde	ACR*	Hvy Sep Bde	Hvy Bde	Lt Sep Bde
UTC			7FVUM	7FVUK	7FVUW	7FVUZ	7FVVN	7FVVF	7FVVM
Officer									
ALO	O6	11F4Y/12F4Y	1						
ALO	O5	11F4U/12F4U	2	1					
ALO	O4	11F4U/12F4U	2	3	1	3	2	1	3
ALO	O3	11F4U/12F4U			1	1	1	1	1
TALO	O4	11A4U	1	1		1			
TALO	O3	11A4U	1	2			1		1
Intel Officer	O3	14N3B	2						
Enlisted									
TACCS	E9	1C400	1						
TACCS	E8	1C491		1					
TACCS	E7	1C471	1	1		1	1		1
TACCS	E6	1C471	1		1	1	1	1	1
TACCS	E5	1C471	1	2	1	4	1	1	1
TACCS	E4	1C451	1	1	1	4	1	1	1
TACCS	E3	1C431	1	1	1	3		1	
Radio Maint	E7	2E173		1					
Radio Maint	E6	2E173		1					
Radio Maint	E5	2E153		2		1	1		1
Radio Maint	E4	2E153		2		1	1		1
Supply	E5	2S051		1		1	1		1
Supply	E4	2S051		1					
Power Pro	E5	3E052		1			1		1
Veh Maint	E5	2T451		1		1	1		
Info Mgt	E7	3A071	1						
Info Mgt	E5	3A051		1		1	1		1
Intelligence	E5	1N051	1						
Personnel	E5	3S051	1	1					
Personnel	E4	3S051		1		1	1		1
TOTAL			18	26	6	24	15	6	15

AFS	GRADE	AFSC	Hvy Bn*	Lt Bde	Lt Bn*	Rgr Rgt	Rgr Bn	SOF TACP	Bn ALO
UTC			7FVVE	7FVUH	7FVUF	7FVUR	7FVUS	7FVUB	7FVVS
Officer									
ALO	O4	11F4U/12F4U		1		2			
ALO	O3	11F4U/12F4U		1			2		
ALO	O3	11S4U				1			
ALO	O3	11F3N							1
TALO	O4	11A4U				1			
Enlisted									
TACCS	E7	1C471				1			
TACCS	E6	1C471		1		1	1	2	
TACCS	E5	1C471	1	1	1	2	1	2	
TACCS	E4	1C451		1	2	2	2		
TACCS	E3	1C431	1	1	2				
TOTAL			2	6	5	10	6	4	1

** Indicates UTC will be augmented by Bn ALO (7FVVS)*

STANDARD ASOC STAFFING

OFFICER								
	AFSC	LT COL	MAJ	CAPT				TOTAL
Commander (ALO)	C11F4U	1						1
Ftr Plt (ALO)	11F4U	1						1
Ftr Plt/Nav (ALO)	11F4U/12F4U		2	3				5
Air Ops Off Plt (F16)	11F4H			1				1
Air Ops Off Plt (A10)	11F4B			1				1
Intel Applications Off	14N3B			3				3
Comm/Elec Officer	33S3			1				1
Subtotal								*13*
ENLISTED								
	AFSC	SMS	MSG	TSG	SSG	SRA	AIC	TOTAL
First Sergeant	8F090		1					1
Personnel	3S0X1					1		1
Information Mgr	3A0X1			1	1	2		4
Tac Air Cmd/Ctrl	1C4X1		1	1	5	4	5	16
Intel Ops	1N0X1		1	1	1			3
Power Production	2A6X2		1	1	3	4	3	12
SAT/Wideband CE	2E1X1		1	3	6	7	2	19
Radio Maintenance	2E1X3		1	1	5	5		12
Comm Sys Supt	2E190	1						1
Elec Comp & Swg	2E2X1			1	2	2		5
Secure Comm Sys	2E3X1			1	1		1	3
Fuels	2F0X1				1			1
Logistics/Plans	2G0X1		1					1
Inventory Mgt	2S0X1			1	2	1		4
Veh Ops Dispatch	2T1X1				1	1		2
Veh Maint Ctl/Analy	2T3X3				1			1
GP Veh/Body Maint	2T4X0			1				1
GP Veh Maint	2T4X1				1	4		5
Com Comp Sys Prog	3C0X1			1	1	2	1	5
Com Comp Sys Ctl	3C2X1				1	2		3
HVAC & Refrig	3E1X1					1		1
Subtotal								*101*
TOTAL ASOC PERS								114

ACC BATTALION AIR LIAISON OFFICER (BALO) PROGRAM

A7.1. Organization. (BALO Program does not apply to the ANG) In garrison, BALOs are OA-10, AFAC qualified pilots assigned to an A/OA-10 squadron. They deploy TDY to support their by-name-aligned Army unit where they are attached to the co-located Air Support Operations Squadron or Flight (ASOS/ASOF). When associated with the aligned battalion the BALO reports to the brigade ALO (contingencies, wartime or peacetime exercises). During operations, when not employed with the aligned battalion; the BALO reports to the A/OA-10 squadron commander.

A7.2. Alignments. Wings with A/OA-10 squadrons are aligned to Army maneuver units by HQ ACC/DOY message. A/OA-10 squadrons will align a BALO to a specific Army battalion and send a letter detailing the alignments to the ASOS/ASOF commanders. The minimum period that a BALO will be aligned to an Army unit is 12 months. Changes of alignment within this period require wing commander approval. The intent is to provide a by-name ALO for a minimum period agreed to by both Army and Air Force IAW the ACC/AMC/FORSCOM/TRADOC Memorandum of Agreement (Command MOA).

A7.3. Scheduling Guidance. The ASOS/ASOF/CC is the sole source tasking authority. The BALO may be tasked up to eight times for a combined maximum of 60 days of TDY. Requests for deployment, normally from the battalion commander, will be made NLT 60 days in advance specifying arrival and departure dates. The ASOS/ASOF/CCwill then notify the flying squadron of the requirement. The ASOS/ASOF/CC will facilitate and coordinate between the battalion and the flying squadron for training arrival/departure date conflicts, date changes within the 60 day notification window, or during the BALO's deployment. If no solution can be reached, the BALO's wing commander will provide final resolution.

A7.4. Wing Commander Involvement. The A/OA-10 squadron wing commanders will meet at least annually with their supported division, separate brigade, or armored cavalry regiment commander. Meeting agenda items will include any trends identified in the BALO program, feedback from the Army on the program, the process by which BALO support is provided, and the level and quality of support provided by the Air Force to the Army.

A7.5. Quality Performance Measurement (QPM). To permit an objective evaluation of any process, QPMs should be derived from both the customer's requirements and the supplier's specifications. An examination of Army requirements and Air Force specifications has resulted in the development of five QPMs: tasking notification, BALO alignment, arrival for training, departure from unit, and Army feedback received. These measurements will help organizations at all levels of the BALO process identify potential problems and recommend actions to improve the probability of meeting customer requirements.

A7.5.1. When BALO support is requested by the Army, the ASOS/CC will log the request date (notification QPM) to confirm compliance with the minimum 60 day notification criteria. The ASOS/CC will then forward the requirement to the A/OA-10 squadron commander.

A7.5.2. When the BALO reports to the ASOS, the ASOS will record if the BALO is the aligned pilot (alignment QPM) and if he has arrived NLT the requested date (arrival QPM). When the BALO departs the aligned battalion, the ASOS will record the date to insure it is NET the agreed date (departure QPM).

A7.5.3. The last QPM that the ASOS will track is the number of Army responses (Army feedback QPM) to flying squadron requests for BALO performance feedback. When an alignment changes or when a performance report is due on a BALO, the flying squadron will request Army feedback on BALO performance through the ASOS/CC. The ASOS/CC will forward the request to the battalion commander. On the suspense date or when the Army feedback is received, the ASOS/CC will add his comments and forward the feedback to the flying squadron for use in the performance report.

A7.5.4. The ASOS will track QPMs and forward the data to the BALO wing commanders, corps ALO, and the NAF. The wings will trend the data and forward their trend information to HQ ACC/DOY.

A7.6. ACC/AMC/FORSCOM/TRADOC Memorandum of Agreement. The Command MOA provides related additional guidance and is the detailed contract between the USAF and the US Army for the execution of the BALO program as part of the support provided by the two services to each other.

IC 97-1 TO AFI 13-106, AIR SUPPORT OPERATIONS CENTERS AND TACTICAL AIR CONTROL PARTIES

★This revision deletes the final sentence in paragraph A2.2.1.4. This sentence is deleted because it creates confusion by implying that unauthorized personnel may provide terminal attack control to CAS aircraft.

★A2.2.1.4. The Joint Air Attack Team (JAAT) is a combination of attack and scout helicopters and fixed-wing attack aircraft, which may be supported by field artillery, operating together to simultaneously attack a single target or target array. The JAAT may operate either as an integrated combined arms team or may operate independently away from ground units. When integrated with ground forces, the JAAT may be strengthened by the firepower capabilities of maneuver forces.